

Outdoor noise levels at the nearest off-site receptors will be well within the 55-dBA daytime guideline, to protect against activity interference and annoyance (EPA, 1978). Noise levels during process operation and reclamation should cause no off-site impacts, since the PAA is not in close proximity to off-site receptors and will occur only during daylight hours.

Section 5.7 discusses the mitigation measures for noise impacts.

## 4'10 Potential Historic and Cultural Resources ImPacts

A Level III Cultural Resources Evaluation was conducted in the PAA (Appendix 4.10-A). Personnel from the Archaeology Laboratory, Augustana College (Augustana), Sioux Falls, South Dakota, conducted on-the-ground field investigations between April 17 and August 3, 2007.

Augustana documented 161 previously unrecorded archaeological sites and revisited 29 previously recorded sites during the current investigation. Expansion of site boundaries during the 2007 survey resulted in a number of previously recorded sites being combined into a single, larger site. Twenty-eight previously recorded sites were not relocated during the current investigation. Excepting a small foundation, the non relocated sites were previously documented as either prehistoric isolated finds or diffuse prehistoric artifact scatters.

Prehistoric sites account for approximately 87 percent of the total number of sites recorded. Historic sites comprise approximately 5 percent of total sites recorded, while multi-component sites (prehistoric/historic) comprise the remaining 8 percent. Ten of the sites documented have only prehistoric and historic components.

The small number of Euro-American sites documented was not unanticipated given the peripheral nature of the PAA in relation to the Black Hills proper. The disparity existing between the number of historic and prehistoric sites observed in the PAA is also not unexpected; however, the sheer volume of sites documented in the area is noteworthy. The land evaluated as part of the Level III cultural resources evaluation has an average site density of approximately 1 site per 8.1 acres. Even greater site densities were reported in 2000 during the investigation of immediately adjacent land parcels for the Dacotah Cement/BLM land exchange (Winham et al., 2001). This indicates that the proposed Permit Area is not unique, in regards to the number of documented sites, and is typical of the periphery of the Black Hills.

As construction takes place any previously undetected historical or cultural resources will be reported to the proper agency. The site will be evaluated and released by the proper agency

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before construction continues within the specific area. The phased approach that Powertech (USA) proposes will increase the likelihood of safeguarding historical and/or cultural resources. Another example of phasing is a license condition that requires cessation of any site activities and the conduct of a cultural resources inventory if previously undetected historic or cultural properties are discovered during the development and construction of wellfields. Thus, "phasing" is an essential and integral component of *all aspects* of ISL uranium recovery projects (NMA, 2007).

Powertech (USA) has executed a Memorandum of Agreement, (MOA), attached as Appendix 4.10-B to this document with the State Archeologist to ensure to preservation of any historical sites that may be present within the PAA. The MOA outlines all actions needed to ensure no significant historic, cultural, or archeological resources will be damaged during production activates.

Section 5.8 discusses the mitigation measures for historic and cultural resources impacts.

## 4'11 Potential Visual/Scenic Resources ImPacts

Potential short term impacts to the visual resources produced during construction will come from the addition of access roads, electrical distribution lines, header houses as well as drilling. Temporary impacted areas will be reclaimed upon completion of construction and debris created during construction will be removed as soon as possible to limit the areal extent affected during construction.

The sources of potential long-term impacts to the visual resources will be the presence of the central plant, wellhead covers, access roads, a pipeline, holding ponds, and several ancillary buildings. These potential long-term visual impacts will remain present until the completion of restoration and reclamation, which will efface the presence of the visual impacts associated with the proposed action.

The proposed action will result in temporary, minor impacts to visual and scenic resources. The project will maintain the visual resource classification of the area. According to NUREG-1569, if the visual resource evaluation rating is 19 or less, no further evaluation is required. Based on the visual resource inventory conducted in June 2008, the total score of the two Scenic Quality Rating Units within the Proposed License Area were 11 and 13; therefore, no further evaluation of the existing scenic resources or future changes to the scenic resources of the area due to the proposed action will be required.



To minimize potential impacts to visual and scenic resources, building materials and paint will be selected that complement the natural environment, according to BLM guidelines. Construction and placement of structures will take into consideration the topography in order to conceal wellheads, plant facilities, and roads from public vantage points. In order to mitigate the visual impacts of roads constructed, the topography that the road follows as well as the area of disturbance will be considered.

Impacts during aquifer restoration and decommissioning phases to visual resources are expected to be the same or less (SMALL) to impacts during operations (NUREG-1910, 2008).

Section 5.9 discusses the mitigation measures for visual/scenic resources impacts.

## 4'12 Potential Socioeconomic ImPacts

Although a proposed facility size and production level can vary, the peak annual employment at an ISL facility range up to about 200 people, including construction (Freeman and Stover, 1999; NUREG-1508, 1997; Energy Metals Corporation, U.S., 2007) as stated in NUREG-1910. In general the number people associated with an ISL facility workforce could be as many as 500 (i.e., 200 workers times 2.5 persons per household) (NUREG-1910, 2008). The following section highlights potential socioeconomic impacts of the proposed project to Custer and Fall River Counties. A cost-benefit analysis for the proposed action is presented in Section 7.0. Overall, potential socioeconomic impacts from ISL facilities in the proposed project region would range from SMALL to MODERATE (NUREG-1910, 2008).

## 4'12'1 Construction

Assuming a peak workforce of about 86 payroll employees, the influx of workers is expected to result in a small to moderate impact in Custer and Fall River Counties because of the short duration of construction phase (18-24 months) and the small size of the workforce compared to the regional labor pool of 9,202 people working full and/or part-time jobs (SD-REAP, 2008). The impacts of worker influx will be mitigated by preferentially sourcing the labor force from the within the surrounding region.

The potential direct, indirect and induced effects on Custer and Fall River Counties' employment are shown on Table 4.12-1. The direct employment effects refer to the employment directly generated by the project. For the initial construction phase beginning in year one, the IMPLAN model estimated 171 additional non-payroll workers hired in Custer and Fall River Counties